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| 10/518,270 | 12/16/2004 | David Keith Roberts | NL 020547 | 3558 |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on _28 March 2007_.

2a)☒ This action is **FINAL**.     2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) _1-9,11,14 and 17-26_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-9, 11, 14, 17-26_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☒ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

## DETAILED ACTION

This final action is in response to the amendment filed on 03/28/2007. Claims 10, 12, 13, 15, & 16 have been canceled. Claims 1-9, 11, 14, & 17-26 are pending and have been considered as follows.

### Examiner's Note

1.    The Applicant appears to be attempting to invoke 35 U.S.C. 112 6th paragraph in Claims 22 & 23 by using "means-plus-function" language. However, the Examiner notes that the only "means" for performing these cited functions in the specification appears to be computer program modules. While the claims pass the first test of the three-prong test used to determine invocation of paragraph 6, since no other specific structural limitations are disclosed in the specification, the claims do not meet the other tests of the three-prong test. Therefore, 35 U.S.C. 112 6th paragraph has not been invoked when considering these claims below.

## *Claim Objections*

2.      Claim 14 is objected to under 37 CFR 1.75(c), as being of improper dependent form for

failing to further limit the subject matter of a previous claim.  Claim 14 is a method claim (i.e.

process) that refers back to Claim 1.  The Office considers any claim that refers to another claim

as dependent thereon, i.e. a dependent claim.  Since Claim 1 is a method claim comprising three

steps and Claim 14 fails to add, delete, or change any of these steps, Claim 14 fails to further

limit its parent claim.  Applicant is required to cancel the claim(s), or amend the claim(s) to place

the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

## *Claim Rejections - 35 USC § 112*

3.      The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
> subject matter which the applicant regards as his invention.

4.      Claims 18-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for

failing to particularly point out and distinctly claim the subject matter which applicant regards as

the invention.

-    Claim 18 recites the limitation "said first field" and "said second field" in lines 2 & 3.

     There is insufficient antecedent basis for this limitation in the claim.

-    Claim 19 recites the limitation "said upper and lower fields" and "said respective

     patterns" in lines 1-3.  There is insufficient antecedent basis for this limitation in the

     claim.

- Claim 20 recites the limitation "said first field" and "said second field" in lines 2 & 3.

  There is insufficient antecedent basis for this limitation in the claim.

- Claim 21 recites the limitation "said respective patterns" in line 3. There is insufficient

  antecedent basis for this limitation in the claim.

The examiner notes that first/second fields & upper/lower fields will be considered to be

equivalent with first/second portions of a frame for the rejections below.

### *Claim Rejections - 35 USC § 103*

5.     The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6.     Claims 1-9, 14, 17-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Isnardi et al (US-6037984-A) in view of Atul et al ("MPEG-4: An Object-based Multimedia

Coding Standard Supporting Mobile Applications").

Claims 1 & 22:

Isnardi et al disclose a method and an apparatus of/for embedding a signature in an audio-visual

signal for authentication of said audio-visual signal, said signal being comprised of a plurality of

sequential frames comprising,

- "calculating a signature based on the stored first portion of said frame of said audio-

  visual signal" (i.e. "A watermark image is similarly divided into blocks and DCT coded")

  [column 1 lines 57-58];

- "embedding the signature in one of said first portion and/or at least a second portion of said frame of said audio-visual signal" (i.e. "Both of the aforementioned papers disclose a bitstream domain watermarking technique where the "block" of an image frame within the video sequence is coded and then combined with a coded watermark signal") [column 1 lines 51-54];

but Isnardi et al do not disclose,

- "storing a first portion of a frame of said audio-visual signal, thereby allowing for a reduced memory requirement relative to storing an entire frame of said audio-visual signal"

however, Atul et al do disclose,

- "A set of individually coded audiovisual objects (natural or synthetic) are obtained multiplexed from a storage or transmission medium…In a general sense, the H.263 standard [23] uses the motion compensated DCT coding framework which is also common to the H.261, the MPEG-1 and the MPEG-2 standards. This consists of partitioning each picture into macroblocks, where a macroblock consists of 16 X 16 luminance (Y) block (composed of 4, 8 X 8 blocks) and the corresponding 8 X 8 chrominance blocks of Cb, and Cr" [page 6 columns 1 & 2];

Therefore, it would have been obvious for one of ordinary skill in the art at the time of the applicant's invention to include, "storing a first portion of a frame of said audio-visual signal, thereby allowing for a reduced memory requirement relative to storing an entire frame of said

audio-visual signal," in the invention as disclosed by Isnardi et al for the purposes of creating a

"standard [19] aimed at coding of video at low bit-rates of 10–24 kbit/s and is based on the

earlier ITU-T H.261 video standard [22]" in order to "optimize at 64 kbit/s (although it allows a

range of 64 kbit/s to 2 Mbit/s)" [Atul et al page 6 column 2].

Claim 2:

Isnardi et al and Atul et al disclose a method of embedding a signature in an audio-visual signal

for authentication of said audio-visual signal, said signal being comprised of a plurality of

sequential frames, as in Claim 1 above, further comprising,

- "said first and second portions of said frame of said audio-visual signal respectively

  comprise patterns of horizontal lines of said frame of said audio-visual signal" (i.e. "The

  frame is divided into a plurality of "blocks" that conventionally contain a 16.times.16

  group of pixels") [column 3 lines 52-54].

Claim 3:

Isnardi et al and Atul et al disclose a method of embedding a signature in an audio-visual signal

for authentication of said audio-visual signal, said signal being comprised of a plurality of

sequential frames, as in Claim 1 above, further comprising,

- "said steps of calculating- and embedding are repeated until a signature is embedded for

  all regions of said frame" (i.e. "The image that is watermarked is generally divided into a

  plurality of blocks of pixels, where each block is watermarked in the above manner on a

  block-by-block basis") [column 2 lines 27-30].

Claim 4:

Isnardi et al and Atul et al disclose a method of embedding a signature in an audio-visual signal

for authentication of said audio-visual signal, said signal being comprised of a plurality of

sequential frames, as in Claim 1 above, further comprising,

- "said first portion of said audio-visual signal comprises a slice of at least one consecutive

  line of a plurality of horizontal lines of said frame of said audio-visual signal" (i.e. "The

  frame is divided into a plurality of "blocks" that conventionally contain a 16.times.16

  group of pixels") [column 3 lines 52-54];

- "said second portion comprises a slice of at least one consecutive horizontal line of said

  plurality of horizontal lines of said frame of said audio-visual signal" (i.e. "The frame is

  divided into a plurality of "blocks" that conventionally contain a 16.times.16 group of

  pixels") [column 3 lines 52-54].

Claim 5:

Isnardi et al and Atul et al disclose a method of embedding a signature in an audio-visual signal

for authentication of said audio-visual signal, said signal being comprised of a plurality of

sequential frames, as in Claim 4 above, but Isnardi et al do not disclose,

- "said audio-visual signal is an interlaced signal"

- "said first portion comprises one of all even or all odd lines"

- "said second portion comprises all remaining odd or even lines not included in said first

  portion"

however, <u>Atul et al</u> do disclose,

- "interlaced video" [page 5 column 2];

- "the binary alpha plane, a rectangular bounding box enclosing the shape to coded is

  formed such that its horizontal and vertical dimensions are multiples of 16 pixels

  (macroblock size)" [page 14 column 1];

Therefore, it would have been obvious for one of ordinary skill in the art at the time of the

applicant's invention to include, "said audio-visual signal is an interlaced signal" and "said first

portion comprises one of all even or all odd lines" and "said second portion comprises all

remaining odd or even lines not included in said first portion," in the invention as disclosed by

the combination of <u>Isnardi et al</u> and <u>Atul et al</u> since interlaced video is a standard type of video

and a matrix of pixels would imply that there are even and odd lines formed by them. In

addition, if a first portion comprised half of the odd and even lines of pixels then obviously the

next portion (i.e. second portion) would comprise the rest of the odd and even lines if there are

no other subsequent portions.

Claim 6:

<u>Isnardi et al</u> and <u>Atul et al</u> disclose a method of embedding a signature in an audio-visual signal

for authentication of said audio-visual signal, said signal being comprised of a plurality of

sequential frames, as in Claim 1 above, but <u>Isnardi et al</u> do not disclose,

- "said audio-visual signal is a non-interlaced signal"

- "said first and second portions comprise consecutive slices of said audio-visual signal,

  wherein each of said consecutive slices are further comprised of at least one consecutive

  line of said frame"

however, Atul et al do disclose,

- "noninterlaced video" [page 5 column 2];

- "the binary alpha plane, a rectangular bounding box enclosing the shape to coded is

    formed such that its horizontal and vertical dimensions are multiples of 16 pixels

    (macroblock size)" [page 14 column 1];

Therefore, it would have been obvious for one of ordinary skill in the art at the time of the

applicant's invention to include, "said audio-visual signal is a non-interlaced signal" and "said

first and second portions comprise consecutive slices of said audio-visual signal, wherein each of

said consecutive slices are further comprised of at least one consecutive line of said frame," in

the invention as disclosed by the combination of Isnardi et al and Atul et al since noninterlaced

video is a standard type of video and macroblocks (i.e. consecutive slices) are comprised of

arrays of pixels (i.e. at least one consecutive line of said frame).

Claim 7:

Isnardi et al and Atul et al disclose a method of embedding a signature in an audio-visual signal

for authentication of said audio-visual signal, said signal being comprised of a plurality of

sequential frames, as in Claim 1 above, further comprising,

- "the embedded signature comprises a watermark" (i.e. "One technique used to identify

    digital image ownership is a digital "watermark" that is embedded into an image or image

    sequence") [column 1 lines 15-16];

Claim 8:

Isnardi et al and Atul et al disclose a method of embedding a signature in an audio-visual signal

for authentication of said audio-visual signal, said signal being comprised of a plurality of

sequential frames, as in Claim 7 above, further comprising,

- "the watermark is embedded as a spread spectrum watermark" (i.e. "spread-spectrum...

  the spread watermark") [column 1 lines 28 & 44];

Claim 9:

Isnardi et al and Atul et al disclose a method of embedding a signature in an audio-visual signal

for authentication of said audio-visual signal, said signal being comprised of a plurality of

sequential frames, as in Claim 7 above, further comprising,

- "the watermark is embedded in a different portion of said frame than the portion of said

  frame for which said signature is generated" (i.e. "The DCT coefficients representing the

  coded watermark block and the coded image block are then added together to form a

  combined block") [column 1 lines 58-61];

Claim 14:

Isnardi et al and Atul et al disclose a method of embedding a signature in an audio-visual signal

for authentication of said audio-visual signal, said signal being comprised of a plurality of

sequential frames, as in Claim 1 above, further comprising,

- "instructions that when executed by a computer implement the method of claim 1" (i.e.

  "This invention is generally used in a block-based image encoder, such as an MPEG

  encoder, where the masked array is applied to an embedded decoder such that a predicted

  image is generated therefrom") [column 2 lines 32-35];

Claim 17:

Isnardi et al and Atul et al disclose a method of embedding a signature in an audio-visual signal

for authentication of said audio-visual signal, said signal being comprised of a plurality of

sequential frames, as in Claim 1 above, but Isnardi et al do not disclose,

- "the first and second portions are selected based on said audio-visual signal being one of

    an interlaced or a noninterlaced signal"

however, Atul et al do disclose,

- "interlaced...noninterlaced video" [page 5 column 2];

Therefore, it would have been obvious for one of ordinary skill in the art at the time of the

applicant's invention to include, "the first and second portions are selected based on said audio-

visual signal being one of an interlaced or a noninterlaced signal," in the invention as disclosed

by the combination of Isnardi et al and Atul et al since a video signal would be of either an

interlaced or noninterlaced type as is standard.

Claim 18:

Isnardi et al and Atul et al disclose a method of embedding a signature in an audio-visual signal

for authentication of said audio-visual signal, said signal being comprised of a plurality of

sequential frames, as in Claim 17 above, but Isnardi et al do not disclose,

- "said audio-visual signal is said interlaced signal"

- "said first field comprising an upper field of said frame of said audio-visual signal"

- "said second field comprising a lower field of said frame of said audio-visual signal"

however, <u>Atul et al</u> do disclose,

- "interlaced...noninterlaced video" [page 5 column 2];

- "For the binary alpha plane, a rectangular bounding box enclosing the shape to coded is

  formed such that its horizontal and vertical dimensions are multiples of 16 pixels

  (macroblock size). For efficient coding, it is important to minimize the number of

  macroblocks contained in the bounding box. The pixels on the boundaries or inside the

  object are assigned a value of 255 and are considered opaque while the pixels outside the

  object but inside the bounding box are considered transparent and are assigned a value of

  0" [page 14 column 1];

Therefore, it would have been obvious for one of ordinary skill in the art at the time of the

applicant's invention to include, "said audio-visual signal is said interlaced signal" and "said first

field comprising an upper field of said frame of said audio-visual signal" and "said second field

comprising a lower field of said frame of said audio-visual signal," in the invention as disclosed

by the combination of <u>Isnardi et al</u> and <u>Atul et al</u> since a video signal would be of either an

interlaced or noninterlaced type as is standard and is comprised of macroblocks (i.e.

portions/fields) that determine opaque or transparent sections (i.e. upper/lower fields) of each

frame.

Claim 19:

Isnardi et al and Atul et al disclose a method of embedding a signature in an audio-visual signal

for authentication of said audio-visual signal, said signal being comprised of a plurality of

sequential frames, as in Claim 18 above, but Isnardi et al do not disclose,

-   "said upper and lower fields comprise patterns of horizontal lines of said audio-visual

    signal, each of said respective patterns of horizontal lines having fewer lines than the

    entire audiovisual signal"

however, Atul et al do disclose,

-   "For the binary alpha plane, a rectangular bounding box enclosing the shape to coded is

    formed such that its horizontal and vertical dimensions are multiples of 16 pixels

    (macroblock size)" [page 14 column 1];

Therefore, it would have been obvious for one of ordinary skill in the art at the time of the

applicant's invention to include, "said upper and lower fields comprise patterns of horizontal

lines of said audio-visual signal, each of said respective patterns of horizontal lines having fewer

lines than the entire audiovisual signal," in the invention as disclosed by the combination of

Isnardi et al and Atul et al since a video signal comprises frames that comprise of macroblocks

comprising pixels arranged in horizontal and vertical dimensions.

Claim 20:

Isnardi et al and Atul et al disclose a method of embedding a signature in an audio-visual signal

for authentication of said audio-visual signal, said signal being comprised of a plurality of

sequential frames, as in Claim 17 above, but Isnardi et al do not disclose,

- "said audio-visual signal is said non-interlaced signal"

- "said first field comprising an upper half of said frame of said audio-visual signal"

- "said second field comprises a lower half of said single frame"

however, Atul et al do disclose,

- "interlaced...noninterlaced video" [page 5 column 2];

- "For the binary alpha plane, a rectangular bounding box enclosing the shape to coded is

   formed such that its horizontal and vertical dimensions are multiples of 16 pixels

   (macroblock size). For efficient coding, it is important to minimize the number of

   macroblocks contained in the bounding box. The pixels on the boundaries or inside the

   object are assigned a value of 255 and are considered opaque while the pixels outside the

   object but inside the bounding box are considered transparent and are assigned a value of

   0" [page 14 column 1];

Therefore, it would have been obvious for one of ordinary skill in the art at the time of the

applicant's invention to include, "said audio-visual signal is said non-interlaced signal" and "said

first field comprising an upper half of said frame of said audio-visual signal" and "said second

field comprises a lower half of said single frame," in the invention as disclosed by the

combination of <u>Isnardi et al</u> and <u>Atul et al</u> since a video signal would be of either an interlaced or

noninterlaced type as is standard and is comprised of macroblocks (i.e. portions/fields) that

determine opaque or transparent sections (i.e. upper/lower half) of each frame.

Claim 21:

<u>Isnardi et al</u> and <u>Atul et al</u> disclose a method of embedding a signature in an audio-visual signal

for authentication of said audio-visual signal, said signal being comprised of a plurality of

sequential frames, as in Claim 20 above, but <u>Isnardi et al</u> do not disclose,

- "each of said upper and lower halves of said frame comprise patterns of horizontal lines

   of said audio-visual signal"

- "said respective patterns having fewer lines than the entire audio-visual signal"

however, <u>Atul et al</u> do disclose,

- "For the binary alpha plane, a rectangular bounding box enclosing the shape to coded is

   formed such that its horizontal and vertical dimensions are multiples of 16 pixels

   (macroblock size)" [page 14 column 1];

Therefore, it would have been obvious for one of ordinary skill in the art at the time of the

applicant's invention to include, "each of said upper and lower halves of said frame comprise

patterns of horizontal lines of said audio-visual signal" and "said respective patterns having

fewer lines than the entire audio-visual signal," in the invention as disclosed by the combination

of <u>Isnardi et al</u> and <u>Atul et al</u> since a video signal comprises frames that comprise of macroblocks

comprising pixels arranged in horizontal and vertical dimensions.

Claim 23:

Isnardi et al and Atul et al disclose an apparatus for embedding a signature in an audio-visual

signal for authentication of said audio-visual signal, said signal being comprised of a plurality of

sequential frames, as in Claim 22 above, but Isnardi et al do not disclose,

-   "said means for calculating and means for embedding are performed while said first

    portion is stored in said memory storage device"

however, Atul et al do disclose,

-   "a storage" [page 6 column 1];

Therefore, it would have been obvious for one of ordinary skill in the art at the time of the

applicant's invention to include, "said means for calculating and means for embedding are

performed while said first portion is stored in said memory storage device," in the invention as

disclosed by the combination of Isnardi et al and Atul et al since a video signal would have to be

stored at some location and at some point in time in order to assemble the pieces together as one

viewable whole.

Claim 24:

Isnardi et al and Atul et al disclose an apparatus for embedding a signature in an audio-visual

signal for authentication of said audio-visual signal, said signal being comprised of a plurality of

sequential frames, as in Claim 23 above, further comprising,

-   "said first and second portions comprise patterns of horizontal lines of said audio-visual

    signal" (i.e. "The frame is divided into a plurality of "blocks" that conventionally contain

    a 16.times.16 group of pixels. In what is known as a 4:2:0 sampling structure, this block

    of pixels is processed to form a block of luminance information (e.g., four 8.times.8

blocks of luminance pixels) and the 16.times.16 block is subsampled to form two

8.times.8 blocks of pixels containing chrominance information") [column 3 lines 52-54];

- "said patterns having fewer lines than the entire audio-visual signal" (i.e. "The frame is

divided into a plurality of "blocks" that conventionally contain a 16.times.16 group of

pixels.") [column 3 lines 52-54];

Claim 25:

Isnardi et al and Atul et al disclose an apparatus for embedding a signature in an audio-visual

signal for authentication of said audio-visual signal, said signal being comprised of a plurality of

sequential frames, as in Claim 22 above, further comprising,

- "said apparatus is a camera" (i.e. "With the advent of digitization of images, digital

image distribution and digital video availability, copyright protection of such digital

imagery has become a substantial issue for image publishers and authors") [column 1

lines 11-15];

Claim 26:

Isnardi et al and Atul et al disclose an apparatus for embedding a signature in an audio-visual

signal for authentication of said audio-visual signal, said signal being comprised of a plurality of

sequential frames, as in Claim 25 above, further comprising,

- "the camera is selected from the group consisting of: a surveillance camera, a security

camera, a digital video camera and a medical imaging camera" (i.e. "With the advent of

digitization of images, digital image distribution and digital video availability, copyright

protection of such digital imagery has become a substantial issue for image publishers

and authors") [column 1 lines 11-15];

7.    Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Atul et al</u>

("MPEG-4: An Object-based Multimedia Coding Standard Supporting Mobile Applications") in

view of <u>Isnardi et al</u> (US-6037984-A) and in further view of <u>Vynne et al</u> (US-5960081-A).

Claim 11:

<u>Atul et al</u> and <u>Isnardi et al</u> disclose a method and an apparatus of/for embedding a signature in an

audio-visual signal for authentication of said audio-visual signal, said signal being comprised of

a plurality of sequential frames, as in Claims 1 & 22 above respectively, but the combination of

the two do not disclose,

- "the steps of calculating and embedding said signature are performed in real-time"

however, <u>Vynne et al</u> do disclose,

- "a coding scheme has been developed and implemented to run in near real-time on a

      CRAY T3D massively parallel supercomputer 710. The coding scheme is block based

      and is used for the implementation of the watermark system" [column 12 lines 15-19];

Therefore, it would have been obvious for one of ordinary skill in the art at the time of the

applicant's invention to include, "the steps of calculating and embedding said signature are

performed in real-time," in the invention as disclosed by <u>Atul et al</u> and <u>Isnardi et al</u> since "a near

real-time implementation is highly desirable when working with motion pictures because of the

huge amount of data to be processed for just a few seconds of movie" [column 12 lines 23-26].

## *Conclusion*

8.      Applicant's arguments with respect to claims 1-9, 11, 17, 18, 22, & 24 have been

considered but are moot in view of the new ground(s) of rejection.

9.      Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Examiner Oscar Louie whose telephone number is 571-270-1684.

The examiner can normally be reached Monday through Thursday from 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Nasser Moazzami, can be reached at 571-272-4195. The fax phone number for

Formal or Official faxes to Technology Center 2100 is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private

PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you

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